



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/610,305	07/05/2000	TOSHIMICHI HARADA	106656	4202

25944 7590 05/05/2003

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

15  
EXAMINER

HESS, BRUCE H

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 05/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/619 305

Applicant(s)

Harada et al.

Examiner

Bruce Hess

Group Art Unit

1774

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 2-20-03 (RCE)
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-24 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-24 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Pri rity under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Revi w, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of the patents to Sogabe et al. (U.S. P. 5,879,790), Hayashi et al. (U.S. P. 5,837,382) or Nakamura (U.S. P. 6,210,794).

All of these patents teach thermal transfer recording media comprising a base material, a peel layer containing wax and an ink layer containing styrene resin and EVA (see Sogabe et al. at column 5, lines 3, 4, 42-47, 52, 53 and 63-65 and column 6, lines 2, 3 and 5-7; see Hayashi et al. at column 3, lines 15, 16, 27, 28, 31, 32, 35 and 37-39; and see column 4, lines 30-32, 34 and 35). Sogabe et al. additionally teach that the melt index of the EVA can be from 60 to 1,000 while Hayashi et al. teach that the melt index of the EVA can be from 30 to 200. The experimental modification of this prior art in order to ascertain optimum operating conditions (e.g., determine the styrene/EVA ratio employed in all three patents and the melt index of the EVA used by Nakamura) fails to render applicants' claims patentable in the absence unexpected results.

Evidence of such unexpected results have not been submitted. The data in Table 2 makes no comparisons for a styrene/EVA ratio a) less than 10/90 but greater than zero or b) greater than 50/50. No EVA with a melt index greater than 1000 is tested while only one EVA with a melt index less than 60 (i.e., 3) is tested. The single example (i.e., 6) which employs KA 31 which has an EVA melt index below applicants' lower limit appears to give results which are just as good as those obtained with Examples 4, 5, 7 and 8 (i.e., two triangles). Finally, none of the data is commensurate in scope with claims 1-12 (i.e., the claims not limited to EVA).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce Hess whose telephone number is (703) 308-2402. The examiner can normally be reached on Monday to Friday 9 Am to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7115 for regular communications and (703) 308-7115 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink that reads "Bruce Hess". The signature is written in a cursive, flowing style.

B. Hess/mn  
May 4, 2003

**BRUCE H. HESS  
PRIMARY EXAMINER**